COMMUNITY INFORMATIONAL GROUP MEETING SUMMARY FOR MOTOROLA 52ND STREET SUPERFUND

Soil gas sampling work plan in OU1 community meeting – 6:15-8:15pm, December 9, 2010
Brunson Lee Elementary School
Phoenix, AZ

Project Team Attendees:

U.S. EPA: Janet Rosati, Leana Rosetti, Martin Zeleznik, Gerry Hiatt
Shaw Environmental, Inc. (Shaw): Sue Kraemer, Doug Hulmes
Arizona Department of Environmental Quality: Wendy Flood, Felicia Calderon
Responsible Parties: Jenn McCall (Freescale)
Clear Creek Associates: Barbara Murphy

Public Attendees:

Luis Rivas	Patricia Renteria	Laura Gonzalez
Eva Olivas	Miles Constanza	Rene Chase-Dufault
Wendoly Abrego	Azucena Valdez	Kevin Hadder
Mario Castaneda	Theresa Sweeney	Jerry D. Worsham
Lorana Mineer	Kim Ruff	Raymundo Rivas
James Jones	Ruth Tenrreiro	Mark Holl
Marissa Avila	Mary Moore	Todd Schwartz
Maricela Oampo	Yumin Shi	Steve Brittle
Beth Proffilt	Robert Mongrain	Sherry B. Williams
Evonne Reyes-Roberts	Matt Fesko	Martha Bergin
Lori Kluck	Patricia Weller	Laura Menken

A community meeting was held at the Brunson-Lee elementary school located at 1350 North 48th Street in Phoenix, Arizona from approximately 6:15 pm to 8:05 pm on December 9, 2010. The primary purpose of the meeting was:

- To inform the public of upcoming OU1 soil gas sampling that will be conducted in the residential area west of the former Motorola 52nd facility; and

- To educate the public about the potential vapor intrusion pathway from solvent contaminated groundwater within the study area.

The study area is outlined in the factsheet/meeting invitation prepared by the EPA and dated December 2010.

Meeting invitations were posted throughout the study area, delivered to individual residences and provided to students of the Brunson-Lee elementary school to deliver to their parents. Approximately 30 members of the public were present in addition to regulators and consultants. A list of the attendees is attached to this summary.

Mr. Zeleznik, (RPM for OU1 and OU2) began the meeting by welcoming all attendees and introducing himself and Leana Rosetti, the Community Involvement Coordinator for EPA. Ms. Rosetti provided an overview that summarized the Motorola 52nd Street project history, accomplishments to date, and presented maps of historical and current groundwater TCE plumes. Ms. Rosetti informed that the solvents were used at commercial facilities beginning in the 1950's and were first regulated in 1982. She pointed out that only commercial properties are known to have contaminated soil in the OU1 area; and that most of the contaminated soil has been remediated. She discussed depths to groundwater (shallowest is 40

feet in OU1 and deepest is 100 feet in OU3). She discussed the two groundwater pump and treat plants and stated approximately 20,000 pounds of contaminants have been removed to date. Ms. Rosetti also pointed out that contaminated groundwater in the area is not used for drinking water. A citizen noticed the groundwater plume on the presented map, and asked that street name be provided so she could locate her home. Ms. Rosetti and other members of the audience identified streets on the map for the citizen.

At 8:40 PM, Janet Rosati (RPM for the OU1 Vapor Intrusion Pathway) began her presentation. She explained the potential vapor intrusion pathway to indoor air. She explained that a Five-Year Review of the OU1 Motorola 52nd Street Superfund Site identified the need for collection of new soil gas data using modern sampling techniques. She indicated that modern laboratory techniques can now detect much lower concentrations. She discussed vapor sample location rationale, which were in part based on historical detections in soil gas samples and also targeted sensitive receptors. Ms. Rosati explained the new sampling technique, using glass syringes and a mobile laboratory (H&P Mobile Geochemistry). Duplicate quality control samples will be collected at a rate of one in ten sample locations. The duplicates will target locations where the highest soil gas detections occurred. The duplicates will be collected with summa canisters and analyzed by a fixed-based laboratory. Ms. Rosati discussed the project's schedule. She indicated the public had until January 28, 2011 to provide public input on the Soil Gas Work Plan, and samples are anticipated to be collected in late March to late April.

A citizen inquired who decides the sample locations; and indicated that she had detected a "gas odor" in her neighborhood. Dr. Hiatt explained that it is probably not TCE or PCE, as they do not smell of natural gas, and Ms. Rosati suggested the citizen consult local utility company. Dr. Hiatt explained that solvents typically have a sweet odor; and it is unlikely that one would be able to smell PCE/TCE at expected concentrations.

A citizen inquired about new sampling techniques. Ms. Rosati explained the primary advantage of the new techniques are better leak detection to make sure infiltration of ambient air into the sample does not occur as it would dilute the sample. The EPA also stated that they would not collect samples too shallow, not less than five feet below grade to reduce the effect of barometric pressure as weather systems come through the area.

Mario Castaneda (Technical Advisor to the TAG) pointed out that the soil gas sampling locations do not correlate directly in areas of greatest groundwater contamination. Ms. Rosati pointed out that in OU-1 groundwater has dropped 20 feet in some places and generally, groundwater is no longer present in the alluvium, just in the bedrock. Therefore the soil gas sample locations were chosen primarily on historical soil gas data.

In response to a citizen's comment on exposure versus clean up. Ms. Rosati explained that if soil gas concentrations are above the residential soil gas screening levels, they would go indoors to collect air samples and determine if remediation was necessary.

A citizen asked about the new technique to detect lower concentrations and how does H&P compare to the fixed-based laboratory (Test America). Ms. Rosati and Ms. Kraemer responded that the detection levels should be lower than recently calculated screening levels, and both labs use the same analytical method EPA Method TO-15.

A citizen stated that meetings held in the 1980's indicated that chemicals could infiltrate and impact building materials; and was concerned that citizens may be living in contaminated structures, and asked if there is anything the EPA can do. Dr. Hiatt indicated that they could talk to her doctor. The citizen indicated that she did not have access to health care; and that she had 25 pounds of tumors removed due to cancer. Dr. Hiatt indicated he sympathized with her condition and would try to get someone in touch with her. The citizen suggested that the contamination was near ground surface. Janet explained that soil contamination from Motorola was limited to their facility property, but had leached into groundwater.

Another citizen indicated that he believed Motorola dumped contaminated liquids into canals; another citizen feared that kids swam in the canals. Another citizen indicated that "lots of other chemicals were dumped in the big canal" and it was reported in the newspapers. Another citizen asked if epidemiology studies had been done to see if there are elevated levels of cancer in the area. Dr. Hiatt indicated he did not believe there were cancer registries in the area. Ms. Rosetti explained that the EPA queried available cancer registry data from the Arizona Department of Health Services (ADHS) and found nothing unusual for this neighborhood. Citizen in front stated that ADHS was all political and had little faith in their data.

One citizen indicated he believed there was a drinking water well in Scottsdale, in which TCE was detected, and he believed that water was distributed throughout the Valley. A citizen asked when the last time their drinking water was tested. Ms. Rosetti indicated that drinking water is monitored monthly and reiterated that drinking water is not coming from the local area's groundwater.

Another citizen suggested that the EPA doesn't understand long term effects, and mentioned outdated data. Dr. Hiatt explained that data collected in 1990's indicated contaminate levels were not high enough to suggest long term health effects. However, it is EPA's policy to revisit data; which is why they are conducting the soil gas sampling next year with improved techniques and equipment.

A citizen and Ms. Rosati discussed the ongoing litigation concerning Roosevelt Irrigation District (RID). Ms. Rosati indicated the RID wants to be a purveyor of potable water; and they have filed a lawsuit because some contamination has reached their wells. Mr. Jerry Worsham (working for Arvin Meritor) explained that RID was supposed to only produce water for irrigation.

A citizen asked how long it will take to do the sampling. Dr. Hiatt explained the process. EPA expects the contractor to put in ten sampling points a day and then sample them the next day. The entire soil gas sampling round is expected to take four to six weeks to complete.

Ms. Rosetti encouraged Spanish speakers to ask questions if they want; and they could have the questions translated. Ms Rosetti answered a question in Spanish regarding the safety of water coming from the backyard hose. She responded that this water is supplied by the City of Phoenix and is monitored for drinking safety standards and does not come from the area's groundwater wells.

Another citizen asked why the EPA doesn't start with air sampling. Dr. Hiatt explained that soil gas sampling is much faster, and much less intrusive to citizens than indoor air sampling and soil gas samples can indicate where contamination is originating.

At 7:25 PM, Dr. Hiatt introduced himself as a toxicologist for EPA working on the Motorola 52nd Street Superfund Site and began his presentation. He explained that there are many sources other than soil vapor intrusion that can impact and contaminate indoor air quality such as outdoor air and consumer products. He pointed out that actual vapor intrusion will be much lower in contaminant concentration than soil gas due to dilution with ambient air. He explained the use of indoor air risk-based screening levels (RBSLs), soil gas human health screening levels (SGHHSLs) and the soil gas attenuation factor of .0023 to indoor air. He indicated if soil gas concentrations are greater than residential soil gas screening levels, EPA will do more assessment; he further indicated that something will be done quickly if high concentrations are found in soil gas.

A citizen questioned the sample location rationale, and how that relates to potential effect on peoples' health. Dr. Hiatt explained the grid pattern and locations selected based on historical data; and reiterated how soil gas data is a more efficient way to understand potential affects and sources of contamination.

A citizen asked if studies had been completed about cancer rates in the area. Dr. Hiatt explained the numerous factors that can lead to cancer and the difficulty of attributing cancers to an environmental cause. He explains that cancer rates and epidemiology is more of a role of EPA's sister agency, the Agency for Toxic Substances and Disease Registry, ATSDR.

Mario Castaneda asked if there will be some kind of statistical analysis of soil gas data and how it relates

to health effects. Dr. Hiatt explained they will be looking at each individual sampling point and spatial relations and conduct step-out sampling, if need be. A citizen asked about trigger levels; Dr Hiatt reiterated the use of RBSLs (SGHHSLs).

A citizen asked if there are other health effects from TCE and PCE aside from cancer. Dr. Hiatt indicated that low long term exposures have shown these chemicals can impact liver and kidneys. The short term high exposure usually results in dizziness and loss of coordination. The citizen asked if there was a synergistic effect between PCE and TCE. Dr. Hiatt indicated that they evaluate all the compounds and total the additive effect in Baseline Human Health Risk Assessments.

A citizen asked if there are other contaminates of concern. Dr. Hiatt explained that PCE and TCE are the most toxic; and therefore the focus of the study. Although, other contaminates are analyzed as well and will be evaluated if detected.

A citizen asked what can be done for people that have been exposed or are living in impacted houses. Dr. Hiatt explained sub-slab depressurizing systems can be installed cost effectively; similar to those used to remedy radon. He indicated he would be really surprised if the systems were needed. The citizen asked if the chemicals could be lingering in building materials. Dr. Hiatt said doubtful due to volatility of TCE and PCE, and further explained their physical and chemical properties.

A citizen asked about new and other sources of TCE and PCE. Dr. Hiatt pointed out new sources are limited because toxic chemicals are regulated much more intensely now.

Questions continued and moderator (M. Zeleznik) suggested the meeting break out into “open house” format so that citizens could speak with EPA staff individually and have questions answered one-on-one.

Ms. Rosati pointed out that PCE and TCE are not currently used by ON semi-conductor, and Motorola stopped using them in the 1970’s. She indicated they could provide copies of the Work Plan to anyone who requests a copy; and thanked everyone for their time.

Group meeting adjourned at 8:05. EPA personnel remained to answer questions with the public.